

## **BID SOLICITATION NOTICE**

TO RECEIVE A BID PACKAGE, BIDDER MAY EITHER DOWNLOAD THE BID FROM THE AUTHORITY'S WEBSITE AT <http://www.state.nj.us/turnpike/purchasing.html> OR REQUEST A BID BY COMPLETING THIS FORM AND FAXING IT TO THE NUMBER STATED BELOW FOR RECORD KEEPING PURPOSES. WE REQUEST THAT THE BIDDER COMPLETE THIS FORM AND RETURN TO US, EVEN WHEN BIDDER IS DOWNLOADING THE BID. THIS IS THE ONLY NOTICE OF BIDDING FOR THE FOLLOWING GOODS / SERVICES YOU WILL RECEIVE.

### **THE NEW JERSEY TURNPIKE AUTHORITY PROCUREMENT AND MATERIALS MANAGEMENT DEPARTMENT**

**New Jersey Turnpike Administrative Offices**

P.O. Box 5042

581 Main Street

Woodbridge, New Jersey 07095-5042

Tel. - 732-750-5300 Fax - 732-750-5399

### **INVITATION TO BID**

TITLE: **LED ROADWAY LUMINAIRES FOR  
TURNPIKE INTERCHANGES 13A AND 15X**

BID NO: **RM-94086**

DUE DATE: **August 9, 2012**

TIME: **11:30 AM**

**SUBMIT BIDS BEFORE THE DUE DATE AND TIME TO THE ABOVE ADDRESS**

BIDDER INFORMATION (PLEASE PRINT)

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NAME OF BIDDING ENTITY

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ADDRESS

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CITY, STATE AND ZIP CODE

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E-MAIL ADDRESS

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REPRESENTATIVE TO CONTACT-NAME & TITLE

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TELEPHONE NO.

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FEDERAL TAX I.D. NO. or TAXPAYER I.D. NO.

---

FAX NO

☐ **WE HAVE DOWNLOADED THE BID FROM THE AUTHORITY WEBSITE**

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\_\_\_\_\_  
FAX NO.

\_\_\_\_\_  
BUSINESS CORPORATION \_\_\_\_\_ PARTNERSHIP \_\_\_\_\_ INDIVIDUAL

\_\_\_\_\_  
OTHER (SPECIFY): \_\_\_\_\_

### **BIDDER GUIDELINES/CHECKLIST**

PURSUANT TO N.J.S.A. 27:23-6.1 AND N.J.A.C. 19:9-2.1 et seq. BID PROPOSALS WHICH FAIL TO CONFORM TO THE FOLLOWING REQUIREMENTS MAY BE REJECTED:

1. Bid proposals must be received at or before the public opening time stated on the cover page at the following place: New Jersey Turnpike Authority, Administration Building, 581 Main Street, Woodbridge, New Jersey 07095. Telephone or Facsimile proposals will not be accepted. The accompanying self-addressed envelope should contain or be attached to the bid proposal.
2. The bid proposal must include all price information. Proposal prices shall include delivery of all items F.O.B. destination or as otherwise provided. Price quotes must be firm through issuance of contract.
3. All bid proposal prices must be typed or written in ink. Quote the specified unit of measure. If bidding an alternate, provide detailed specifications.
4. All corrections, white-outs, erasures, re-striking of type, or other forms of alteration or the appearance of alteration, to unit and/or total prices must be initialed in ink by the bidder.
5. The bidder must attend the mandatory site inspection at the following date(s) and time(s) if applicable:
6. **See the Authority's Instructions to Bidders for a complete list of the Authority's standard contract Terms and Conditions, as well as REQUIRED FORMS that must be included with the bid or the bid will be rejected. (SEE ATTACHED)**

#### **Have you included the following documents?**

- (a) State of New Jersey Division of Revenue Business Registration Certificate(s)
  - (b) Certification of Registration with the Secretary of State (only if a foreign (non-NJ) corporation)
  - (c) Acknowledgement of Requirement for Disclosure of Political Contributions
  - (d) Public Works Contractor Registration Certificate(s) (if applicable)
  - (e) Affirmative Action Information Sheet with Certificate or Form AA302
  - (f) Signed Mandatory Equal Employment Opportunity Language
  - (g) SBE/WBE/MBE Certificates and Form
  - (h) Vendor Disclosure Form (EO129 - Location of Services)
  - (i) Notice of Set-Off for State Tax (P.L. 1999, c.159)
  - (j) Automobile Waiver
  - (k) Insurance Requirement
7. **This Request for Bids requires the following Mandatory Documents or the bid will be rejected:**
- Bid Bond and/or Letter of Surety, Cashiers Check Requirement
  - Stockholder/Partnership Disclosure Statement
8. Bidder must sign the Bid
  9. If awarded, a Contract Bond, for 100% of the Total Bid Price.

## **REQUEST FOR BIDS** **THIS IS NOT AN ORDER**

Sealed Bids for RM-94086 will be received at the New Jersey Turnpike Authority Administrative Offices, 581 Main St., Woodbridge, New Jersey, as stated on the cover page at which time and place said proposal will be publicly opened and read. Bidders mailing Bids should allow for their normal mail delivery time to ensure timely receipt of their Public Bids. Please be advised that using overnight / next-day delivery service does not guarantee overnight/next-day deliveries to our location. The Authority will not be responsible for any bid not being received by the required date and time.

### **INTENTION**

It is the intention of the Authority to issue a Price Agreement for the purchase of **LED LUMINARIES AS PER ATTACHED SPECIFICATIONS.** Items purchased under this Agreement will be delivered as directed by the Authority. The term of the contract shall be for six months with the option to extend for an additional six months at the Authority's discretion and Vendor's concurrence. Please contact Richard Bava with any questions regarding this procurement/contract at 732-750-5300 X-8636.

### **BID SHEET INSTRUCTIONS**

Prospective Bidders should follow all instructions in this Request for Bids and in the standard Instructions to Bidders issued by the Authority, and any other documents issued by the Authority in connection with this Request for Bids (collectively, "Bid Documents"). Prospective Bidders must examine the Bid Documents carefully before bidding and must ask the Director of Purchasing in writing for any interpretation or correction of any apparent ambiguity, inconsistency or apparent error therein. Any written request for interpretation or correction shall be directed to the Director of Purchasing. Written requests can be submitted by FAX at 732-750-5399. If necessary, an interpretation or correction shall be issued by the Director of Purchasing as an Addendum and FAXED to prospective Bidders who have obtained the Bid Documents. Upon the issuing of an Addendum, the content of the Addendum shall become part of the Bid Documents. **Requests for interpretation or correction shall be considered only if received at least 5 business days prior to the bid opening date.**

Only written interpretations or corrections issued by the Director of Purchasing by Addendum shall be binding.

The submission of the Bid is conclusive evidence that the Bidder is fully aware of the conditions, requirements, and details as stated in the Bid Documents. If the Bidder, prior to submitting its Bid, fails to notify the Director of Purchasing of the existence of an ambiguity, inconsistency in the Bid Documents, a Bid will conclusively be presumed to have been based upon the interpretation of such ambiguity or inconsistency.

All erasures, interpolations or other physical changes on the Bid form shall be signed or initialed by the bidder. Bids containing any conditions, omissions, erasures, alterations, or items not called for in this Request for Bids, or irregularities of any kind, may be rejected by the Authority, in its sole discretion, as being incomplete. The bidders shall not attach conditions, limitations or provisos to their Bid, except in cases where "Exceptions" are permitted.

**The Authority will accept Approved Equivalent items on this bid.** If a bidder is basing the proposal on items other than what is specified, and wishes the items he proposes to be considered as an "Approved Equivalent," the Bidder shall enter a price on the bid sheet then submit on the Exception Sheet in the exact format of the line item on the Request for Bids contained herein, the item number, an item description, including manufacturers name, model number, and packaging quantities of those Items which the Bidder proposes to substitute.

**Bidders must supply a price for every item listed. Bids not having a price in all listed items may be rejected.** The bid will be awarded to the vendor who supplies the lowest total cost for ALL items as listed in the bid.

Bidders must quote only one price per line item. If a bidder quotes multiple prices per line item, the bid proposal may be rejected.

The Authority will purchase amounts of any given item as needed, at the sole discretion of the Authority and shall not be bound by any quantities listed. The Authority reserves the right to make reasonable increases to line item quantities. All items are to be bid FOB Destination. All shipping, handling, and other costs should be considered in the bid price.

**Award will be made to the lowest, responsible bidder for the Total Amount Bid.**

## **REQUEST FOR BIDS**

### **MATERIAL DESCRIPTION**

ITEM	QUAN	UNIT	DESCRIPTION	PRICE EACH	TOTAL PRICE
1.	43	EACH	Cooper Lighting #VSTB02LEDEUSL2APU4 Type "LP1"	\$	\$
2.	142	EACH	Cooper Lighting #VSTB03LEDEUSL2APU4 Type "LP2"	\$	\$
3.	93	EACH	Cooper Lighting #VSTB04LEDEUSL2APU4 Type "LP3"	\$	\$
4.	98	EACH	Cooper Lighting #VSTB07LEDEUSL3APU4 Type "LP5"	\$	\$
5.	41	EACH	Cooper Lighting #VSTB10LEDEUSL3APU4 Type "LP6"	\$	\$
6.	51	EACH	Cooper Lighting #VSTB12LEDEUSL3APU4 Type "LP7"	\$	\$
7.	228	EACH	Right Angle Tenon Adaptor for Cooper Lighting #VST Fixture for 4" O.D. Pole Top (per Standard Drawing E-03A)	\$	\$
8.	176	EACH	Right Angle Tenon Adaptor for Cooper Lighting #VST Fixture for 6-5/8" O.D. Pole Top (per Standard Drawing E-03A)	\$	\$
9.	64	EACH	Right Angle Tenon Adaptor for Cooper Lighting #VST Fixture for 8" O.D. Pole Top (per Standard Drawing E-03A)	\$	\$
TOTAL OF ITEMS 1 THROUGH 9					\$

**Award will be made to the lowest, responsible bidder for the total items bid.**

**ANY INQUIRIES CONCERNING THIS BID MUST BE SENT VIA FAX NO  
LATER THAN FIVE (5) BUSINESS DAYS BEFORE BID OPENING**

DELIVERY DATE \_\_\_\_\_ to sites as specified in the bid  
specifications. Discount Terms Based On Net 30 Days Only.

**NEW JERSEY TURNPIKE AUTHORITY**

\_\_\_\_\_  
**AUTHORIZED SIGNATURE**

\_\_\_\_\_  
Name of Company and / Authorized Signature of Bidder

## **SIGNATURE PAGE**

**ADDENDA / INQUIRIES:** COMPLETE (if applicable) BEFORE SUBMITTING BID:

Receipt of Addendum / Inquiries # \_\_\_\_\_ dated \_\_\_\_\_ is  
hereby acknowledged.

Receipt of Addendum / Inquiries # \_\_\_\_\_ dated \_\_\_\_\_ is  
hereby acknowledged.

☐

**CHECK BOX IF NO ADDENDA/INQUIRY ISSUED**

(All Addenda / Inquiries must be acknowledged as indicated above.)

**BID IRREVOCABLE:** This offer shall be irrevocable for ninety (90) working days after the date on which the Authority publicly opens this bid except in those instances where an unsuccessful bidder has filed a Protest pursuant to N.J.A.C. 19:9-2.12. Upon notification of a Protest, Bidders are required to hold their prices for an additional 90 days. All bidders will be notified in writing of the action taken by the Authority.

**OFFER/CERTIFICATION:** The undersigned offers and agrees to furnish to the New Jersey Turnpike Authority the services and/or materials in compliance with all terms, conditions, specifications and addenda of the RFB, Bid Documents, and resulting contract. The undersigned further certifies understanding and compliance with the requirements of the standard terms and conditions as stated in the Instructions to Bidders included with the Bid Documents. The undersigned certifies that he or she executes this bid with full authority so to do; and that all statements contained in this bid and in this certification are true and correct, and made with full knowledge that the Authority relies upon the truth of the statements contained herein and in any statements requested by the Authority showing evidence of qualifications in awarding the contract.

I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.

**AUTHORIZED SIGNATURE:** \_\_\_\_\_

Print Name and Title: \_\_\_\_\_

Bidding Entity: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Telephone #: \_\_\_\_\_ Fax: \_\_\_\_\_

Date: \_\_\_\_\_

**NEW JERSEY TURNPIKE AUTHORITY**  
**SPECIFICATIONS**  
**FOR THE PURCHASE OF**  
**LED ROADWAY LUMINAIRES FOR**  
**TURNPIKE INTERCHANGES 13A AND 15X**  
**JULY 2012**

**1. PURPOSE AND INTENT**

The purpose of this Request for Quotation is to obtain bids on roadway Light Emitting Diode (LED) luminaires that have been pre-approved through the New Jersey Turnpike Authority's LED Lighting Solicitation. The solicitation has been posted by the Authority on their website since August 2010 to serve as an open invitation for manufacturers to submit documentation along with corresponding electronic IES photometric files for the Authority's review and evaluation. The intent of the solicitation was primarily to determine those LED fixtures capable of Freeway illumination for single-sided pole spacing greater than 230ft and a roadway width of 6 lanes plus a shoulder, without sacrificing existing illumination design criteria. The added benefits in doing so would provide more energy efficient lighting with less maintenance.

The Authority is seeking to replace existing High Intensity Discharge (HID) lighting with LED for Turnpike Interchanges 13A and 15X, without changing existing pole layouts or infrastructure. Under the pre-qualifying solicitation, those fixtures found to meet a complete solution ranging from narrow ramp lighting up to wide freeway lighting using the same style fixture but with varying optics, were requested by the Authority to submit a sample number of fixtures for field testing and observance by the maintenance department. In turn, the Authority would inform the submitting party whether or not their fixture has been pre-qualified. Reasons for non-qualification were provided in the letter.

While only those fixtures which have been pre-qualified may be proposed under this procurement, those manufacturers who have not yet submitted for pre-approval may do so by meeting the requirements of the LED Solicitation posted on the Authority's website prior to bid. Consequently, the award of this project will be contingent upon having met performance criteria and standards through the New Jersey Turnpike Authority's formal LED solicitation procedure, and competitive bid pricing under this procurement.

The name "Authority" or "NJTA" hereinafter refers to the New Jersey Turnpike Authority, 581 Main Street, Woodbridge, NJ 07095. The name "Vendor" hereinafter refers to the Company retained by the Authority to furnish the LED roadway lighting luminaires.



## **2. CONTRACT PERIOD**

The term of the Contract shall commence upon receipt of an Authority Purchase Order and shall terminate upon receipt of all luminaires as identified in these bid documents, a period which is not expected to exceed 6 months

## **3. REFERENCES**

- A. ANSI/NFPA 70, National Electrical Code
- B. IEEE C62.41, Guide on the Surge Environment in Low-Voltage (1000 V and Less) AC Power Circuits
- C. FCC 47 CFR Part 15, Federal Code Of Regulation (CFR) testing standard for electronic equipment
- D. IESNA LM-79, Electrical and Photometric Measurements of Solid-State Lighting Products
- E. IESNA LM-80, Approved Method for Measuring Lumen Maintenance of LED Light Sources
- F. IESNA TM-15, Luminaire Classification System for Outdoor Luminaires
- G. UL1598, Standard for Safety of Luminaires
- H. NEMA SSL 3-2010, High-Power White LED Binning for General Illumination

## **4. LED LUMINAIRE REQUIREMENTS**

The Authority has developed prequalification requirements for LED light fixtures through its solicitation. The requirements have been available on the Authority's web site for approximately two years at [www.state.nj.us/turnpike/documents/LED-Light-Fixtures\\_Revised-8-2010.pdf](http://www.state.nj.us/turnpike/documents/LED-Light-Fixtures_Revised-8-2010.pdf). The Authority has received a number of technical submittals and luminaire samples in response to the web site solicitation. Based on an analysis of all documentation received along with the field testing of submitted sample fixtures, the Authority has determined that as of this point in time the only LED luminaires that satisfy the Authority's requirements for ramp and roadway lighting are those that are manufactured by Cooper Lighting. Based on that determination this solicitation has been developed utilizing the lighting characteristics of the Cooper Ventus LED luminaires. Luminaires other than those manufactured by Cooper Lighting can be proposed in response to this solicitation however documentation must be provided to clearly demonstrate that the alternate fixtures meet all requirements as defined in this solicitation and the technical specifications defined in the web site solicitation.

Manufacturers must demonstrate the ability to satisfy the ramp and roadway lighting requirements outlined herein utilizing a single style fixture with no more than 7 types of photometric variations. Fixtures required for this procurement are to be mounted on short horizontal pole-top tenons developed for 8-inch diameter (old standard) and 6 ½-inch (new standard) diameter pole-tops. The designations for LED pole-top fixtures are LP1 through LP7 and can be categorized by the attached NJTA LED Standard Drawings E-28A and E-29.

Using Visual™ calculations, pre-qualified fixtures are demonstrated to meet the performance criteria of this chart while maintaining illuminance values of 0.70-0.85 Footcandles (fc); 0.21 (fc) minimum; and a uniformity ratio of 4:1 or better, at a 0 Deg Tilt. Evaluations are conducted at a 0.85 total Light Loss Factor (LLF), which includes luminaire Lamp Dirt Depreciation Factor (LDD) and Lamp Lumen Depreciation Factor (LLD). A single-sided pole arrangement, one fixture per pole shall be used in the analyses at a point spacing of 5 foot on-centers:

### TOLL PLAZA LIGHTING

Illumination requirements for toll plaza approaches are typically 2.5 fc average at less than a 4:1 uniformity ratio, 0.21 fc minimum. Two types of fixture which fall into this category and provide the necessary illumination are LP6 and LP7, where LP6 shall have light output of 40% greater than an LP5 fixture. LP7 shall have a light output of 70% greater than an LP5 fixture.

## **5. QUALIFYING CRITERIA**

The following is additional qualifying criteria that was not included in the Authority's LED solicitation, but must be shown through sufficient documentation provided at the time of bid that such requirements are met or exceeded.

### General Requirements

- i. Each Luminaire shall consist of an assembly that utilizes LEDs as the light source. In addition, a complete luminaire shall consist of a housing, LED array, and electronic driver (power supply).
- b. Each luminaire shall be rated for a minimum operational life of 50,000 hours at an average operating time of 11.5 hours per night at 40°C (104°F) while maintaining greater than 70% of its initial lumen output (L70).
- c. The rated operating temperature range shall be 30°C (-22°F) to +40°C (104°F).
- d. Each luminaire shall be capable of operating above 104°F (40°C), but not expected to comply with photometric requirements at elevated temperatures.
- e. Photometry must be compliant with IESNA LM-79 and shall have been conducted at 25°C ambient temperature.

- f. Each luminaire shall meet all parameters of this specification throughout the minimum operational life when operated at the average nighttime temperature.
- g. The individual LEDs shall be constructed such that a catastrophic loss or the failure of one LED will not result in the loss of the entire luminaire.
- h. Luminaire shall be constructed such that LED modules may be replaced or repaired without replacement of whole luminaire.
- i. Each luminaire shall be listed with Underwriters Laboratory, Inc. under UL1598 for luminaires, or an approved equivalent standard from a nationally recognized testing laboratory, and shall have a certifying label.

#### Photometric Requirements

- a. Optical Assemblies: LEDs shall be provided with discreet over optical elements to provide an IESNA Type II or III distribution. Additional distributions for glare control shall be utilized when direct source must be mitigated. Mitigation must take place without external shielding elements. Optical assemblies shall have a minimum efficiency of 85% regardless of distribution type. All LEDs and optical assemblies shall be mounted parallel to the ground. All LEDs shall provide the same optical pattern such that catastrophic failures of individual LEDs will not constitute a loss in the distribution pattern.
- b. No more than 2% of the total luminaire lumens shall be in the 80° to 90° range and no lumens will be emitted above 90°.
- c. Light Color/Quality: The luminaire shall have a correlated color temperature (CCT) of 4,000K +/-275K. The color rendition index (CRI) shall be a nominal 70. Binning of LEDs shall conform to ANSI/ G. NEMA SSL 3-2010.
- d. Light Color/Quality: The luminaire shall have a correlated color temperature (CCT) of 4,000K +/-275K. The color rendition index (CRI) shall be a nominal 70. Binning of LEDs shall conform to ANSI/ G. NEMA SSL 3-2010.
- e. 78% of the lumens shall be to the streetside of the luminaire.
- f. Each fixture shall have a Lamp Lumen Depreciation (LLD) factor over its rated L70 lifespan duration of no less than 0.90.

#### Thermal Management Requirements

- a. The thermal management (of the heat generated by the LEDs) shall be of sufficient capacity to assure proper operation of the luminaire over the expected useful life.
- b. The LED manufacturer's maximum thermal pad temperature for the expected life shall not be exceeded.

- c. Thermal management shall be passive by design. The use of fans or other mechanical devices shall not be allowed.
- d. The luminaire shall have a minimum heat sink surface such that LED manufacturer's maximum junction temperature is not exceeded at maximum rated ambient temperature.
- e. The heat sink material shall be aluminum.

### Electrical Requirements

- a. Drive current to the LEDs shall not exceed 350mA and the luminaire shall have a minimum efficacy of 87 lumens per watt. The luminaire shall not consume power in the off state.
- b. Operation Voltage: The luminaire shall operate from a 60 HZ  $\pm 3$  HZ AC line over a voltage ranging from 108 VAC to 305 VAC. The fluctuations of line voltage shall have no visible effect on the luminous output.
- c. Power Factor: The luminaire shall have a power factor of 0.90 or greater.
- d. THD: Total harmonic distortion (current and voltage) induced into an AC power line by a luminaire shall not exceed 20 percent.
- e. Surge Suppression: The luminaire onboard circuitry shall include surge protection devices (SPD) to withstand high repetition noise transients as a result of utility line switching, nearby lightning strikes, and other interference. The SPD protects the luminaire from damage and failure for common and differential mode transient peak currents up to 10 kA (minimum). SPD conforms to UL 1449. SPD performance has been tested per procedures in ANSI/IEEE C62.41-2:2002 category C high exposure and ANSI C136.2 10kV BIL. The SPD shall fail in such a way as the Luminaire will no longer operate. The SPD shall be field replaceable.
- f. Operational Performance: The LED circuitry shall prevent visible flicker to the unaided eye over the voltage range specified above.
- g. RF Interference: LED Drivers must meet Class A emission limits referred in Federal Communications Commission (FCC) Title 47, Subpart B, Section 15 regulations concerning the emission of electronic noise.
- h. Drivers shall be an IP66 rated UL class 2 power unit as per UL 1310 with a Class A sound rating and comply with FCC rules and regulations as per Title 47 CFR part 15.
- i. All LED fixtures shall come standard with a 10kV module for transient line surge protection.

### Physical and Mechanical Requirements

- a. A die cast aluminum door frame shall secure the thermally conductive, extruded aluminum heat sinks to an independent electrical compartment. Access to the electrical compartment shall be tool-less. The die cast aluminum housing shall be designed to prevent the buildup of water on the top of the housing. Exposed heat sink fins shall be oriented so that water can freely run off the luminaire to carry dust and other accumulated debris away from the unit. Housing shall have cast in pipe stops, leveling steps and a two bolt mounting system capable of accommodating 1¼" to 2" ID pipe (1 5/8" to 2 3/8" OD).
- b. The maximum weight of the luminaire shall be 39 lbs. and the maximum effective projected area shall not exceed 1.31.
- c. The housing shall be grey in color with a flat or semi-gloss sheen.
- d. Luminaire options to include a NEMA photocontrol receptacle.
- e. The assembly and manufacturing process for the LED luminaire shall be designed to assure all internal components are adequately supported to withstand mechanical shock and vibration. Luminaire shall withstand vibration, meeting ANSI C136.31 American Standard for Roadway and Area Lighting Equipment – Luminaire Vibration for both normal and bridge operation (3G minimum).
- f. Luminaire housing shall be UL wet location listed.
- g. The optical assembly of the luminaire shall be protected against dust and moisture intrusion per the requirements of IP-66 (minimum) to protect all optical components.
- h. The electronics/power supply enclosure shall meet the requirements for NEMA/UL wet location.
- i. The circuit board and power supply shall be contained inside the luminaire. Electrolytic capacitors used in the power supplies shall be rated for -40°F to 220°F (-40°C to +105°C), long life ( > 5000 hours ), and operated at no more than 70% of their rated voltage, and 70% of rated current.
- j. Housing and door frame shall be aluminum with a nominal 2.5 mil thick paint finish able to withstand a 3000 hour salt spray test as specified in ASTM Designation: B117.

- k. Each refractor or lens shall be made from UV inhibited high impact optical grade acrylic and be resistant to scratching.
- l. All pole-top LED fixtures shall be capable of mounting to a 2" Diameter vertical or horizontal tenon as shown in the attached drawing. No other adapters or mounting configurations for pole-top fixtures will be accepted.

## **5. QUALITY ASSURANCE**

- A. Luminaires shall be fully assembled and individually electrically tested prior to shipment.
- B. Manufacturers of LED luminaires shall demonstrate a suitable testing program incorporating high heat, high humidity and thermal shock test regimens to ensure system reliability and to substantiate lifetime claims.

### **Submission requirements:**

- Copy of pre-qualification letter from the Authority
- Proposed Bid Price for each type of LED fixture,
- Proposed Bid Price for each type of pole-top mounting adapter
- Complete documentation showing that the qualifying requirements within this specification are met. The manufacturer shall indicate the proper Lamp Lumen Depreciation (LLD) factor to be used for the submitted fixture type. The manufacturer shall also submit the cost for each mounting adapter type as detailed in the attached drawing and listed in the pay items.

## **4. DELIVERY REQUIREMENTS**

Manufacturers must be able to demonstrate the ability to manufacture and ship luminaires such that they are received by the Authority in accordance with the following schedule:

200 Units received by the Authority within 6 weeks of an executed Purchase Order with the remaining units received 4 weeks afterward.

The luminaires shall be shipped directly to the Authority's maintenance material storage location in Woodbridge, NJ.

Deliver luminaires and components carefully to avoid breakage, bending and scoring finishes. Equipment will be inspected by Authority personnel upon delivery.

## 5. PRICING

The Authority **estimates** that the quantity of each luminaire type required is as follows:

<u>Type</u>	<u>Quantity</u>
Type LP1	43
Type LP2	142
Type LP3	93
Type LP5	98
Type LP6	41
Type LP7	51
Type-H Mounting Adapter (4" O.D. Poletop)	228
Type-H Mounting Adapter (6 5/8" O.D. Poletop)	176
Type-H Mounting Adapter (8" O.D. Poletop)	64

**The above quantities are estimates only. The Authority shall in no way guarantee or be bound by these estimates under the terms of this Contract.**

The pricing for this Contract is shown on the Bid Summary page. The Contract will be awarded to the bidder that can satisfy all specifications and technical requirements as outlined in this solicitation and submits the lowest overall bid price based on the total quantity of luminaires as estimated above.

## 6. PROVISIONS FOR PAYMENT

Invoices shall be submitted to the Authority within thirty (30) days of shipment. Invoices submitted after thirty (30) days will **not** be considered for payment.

For all matters regarding transportation charges see **Section 7**.

## 7. FREIGHT CHARGES

All bid prices shall include standard freight charges. The Authority will only pay additional freight charges if accelerated deliveries are requested by the Authority to allow product delivery sooner than the schedule outlined above.

## 8. TERMINATION OF CONTRACT

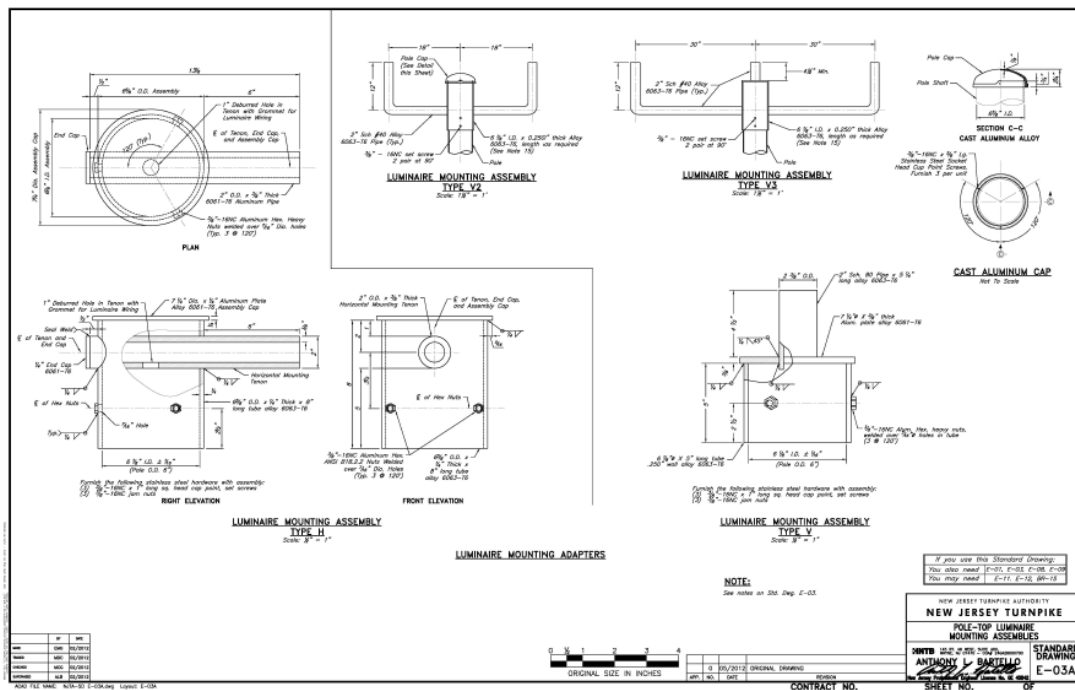
It is recognized by the parties hereto that the services to be provided under this Contract form a part of an essential public service and that such services must be timely and thorough. Accordingly, it is agreed that this Contract may be terminated by the Authority if, in the opinion of the Chief Engineer the Vendor's performance is deemed unsatisfactory. Such termination shall be upon thirty (30) days written notice to the Vendor.

## 9. WARRANTY REQUIREMENTS

The manufacturer shall warrant that the factory-installed electrical system will be free from defects in material and workmanship for 5 years from the date of shipment of the products. If 10% of the individual LEDs (light sources) should fail within 5 years of shipment, the manufacturer shall provide replacement fixtures for all failed fixtures.

The exterior finish of the luminaires shall also be warranted for a period of 5 years from date of shipment. The manufacturer shall repair or replace the defective finish if it exhibits cracking, peeling, excessive fading or corrosion defects during the warranty period.

## 10. Standard Drawing E-03A





**NEW JERSEY TURNPIKE AUTHORITY**

**Exception Form:** Vendors may list proposed equivalent items below for consideration by the Authority, and should include the item number, item description, manufacturer's name, model number and packaging quantities of those items which the vendor proposes to substitute. Vendors may not use this form to attach conditions, limitations, or other provisos to their bid. Please be advised that any proposed equivalent or other exceptions that are deemed to be a material deviation from the specifications shall be a mandatory cause for rejection of the bid, and the vendor proceeds at its own risk.

[illegible]

**Delivery Date Exception**\_\_\_\_\_ **Warranty Date Exception**\_\_\_\_\_

**Vendor's Name** \_\_\_\_\_

**Signature of Vendor Responsible Officer** \_\_\_\_\_ **Date** \_\_\_\_\_